ZyXEL

- Advanced L2 switching features
- 56/100 Gbps non-blocking switch fabric (GS2200-24/24P: 56 Gbps, GS2200-48: 100 Gbps)
- 4 Dual-personality (RJ-45/SFP) GbE interfaces
- Port security and enhanced 802.1X port authentication
- MAC freeze and intrusion lock
- 8 IEEE 802.1p hardware priority queues
- WFQ, WRR and SPQ queuing algorithms
- IEEE 802.3af Power over Ethernet (PoE)(GS2200-24P)
- PoE Power consumption mode for energy saving (GS2200-24P)

GS2200 Series

24/48-port GbE L2 Switch

Cost-effective and Efficient Gigabit Solution

The ZyXEL Gigabit Switch 2200 Series consists of three switches: the ZyXEL GS2200-24, GS2200-24P and GS2200-48.

The GS2200-24 and GS2200-24P deliver 24 port 100/1000BASE-T, 100/1000BASE-T PoE with 4 GbE dual-personalities. The GS2200-48 is an intelligent high-density Layer 2 managed switch with 44 100/1000BASE-T ports, 4 GbE dual-personality ports and 2 GbE SFP open slots.

The GS2200 Series provides high-performance and secure 100/1000 connectivity, access resiliency and security, as well as Traffic Management and QoS functionalities. Feature-rich and easy-to-use, the GS2200 Series is specially designed for branch offices or SME users.

Key Benefits

High performance switch architecture for SME

The ZyXEL GS2200 Series incorporates a high-performance switching architecture that provides 56/100 Gbps non-blocking switch fabric (GS2200-24/24P: 56 Gbps, GS2200-48: 100 Gbps), 41.7/74.4 million packets per-second forwarding rate (GS2200-24/24P: 41.7 Mpps, GS2200-48: 74.4 Mpps) and wire-speed performance to connect high performance desktop devices with resources at the heart of the network. For branch offices and SME users, the GS2200 Series enables the delivery of converged applications and adapts to changing business needs with flexible configurations. In addition, the ZyXEL GS2200 Series is optimised for high-density Gigabit Ethernet deployments and is suitable for both the core and the edge of the network.

Secure enhanced management functionality

The GS2200 Series is easy to use and manage the applications that are needed to support the business and increase productivity. ZyXEL iStacking™ clustering management technology can manage devices across different floors and routing domains to locate other iStacking-capable switches in the same management cluster. This allows administrators to manage 24 switches with one single IP address. This greatly reduces operating costs and offers more flexible maintenance of ZyXEL Switches. IT staff can opt for the Web or command line interface to suit their needs, and even encrypt their instructions with SSHv1/v2 and SSL. With these sophisticated functionalities, the IT staff is empowered to build a highly secure and efficient corporate network with minimum effort.

Future proof networking with minimum disruption

The GS2200 Series provides rich features including VLANs, CoS/QoS, Port Trunking, Rapid Spanning Tree, Security (Port Security and 802.1x authentication) and network management to meet evolving SME requirements. Meanwhile, it delivers the most cost-effective Gigabit Ethernet solution to empower Gigabit converged networking for branch offices and SME users.

Intelligent PoE for cost saving (GS2200-24P)

ZyXEL's Intelligent PoE features provide two power supply modes:

- Classification mode: the switch reserves the maximum power (W) to each powered device (PD) according to the priority levels.
- Consumption mode: the switch manages the entire power supply, so each connected PD gets the actual power it needs.

In the Consumption Mode, ZyXEL's Intelligent PoE will reserve the required power automatically, and you can set power feeding priorities on different ports to get the best use of power resource. This capability can increase the number of devices connected and deliver a better ROI for the business.

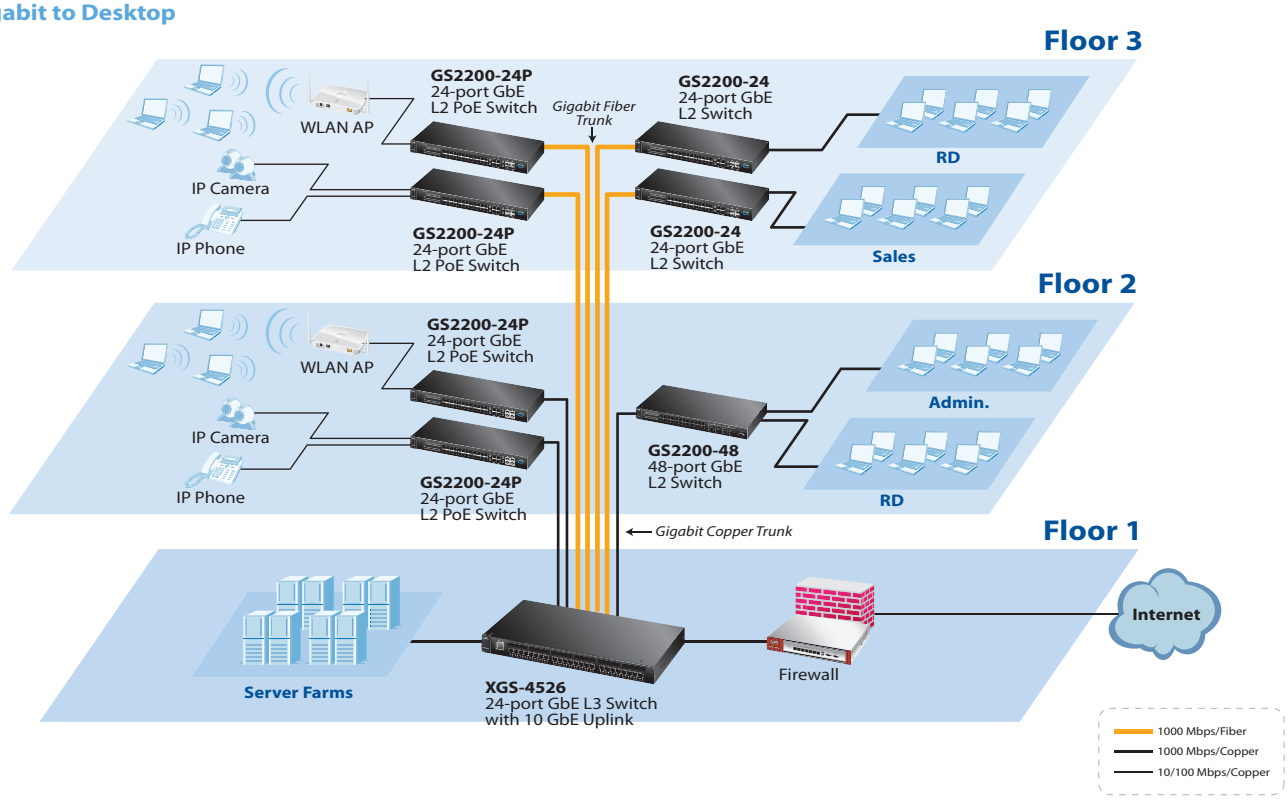
The GS2200-24P provides a total power budget of up to 220 W as default. With the PPS250 external PoE power supply, the GS2200-24P can provide 15.4 W per port to 24 PoE ports simultaneously.

ZyXEL

GS2200 Series
24/48-port GbE L2 Switch

Key Applications

Gigabit to Desktop



Specifications

Model	GS2200-24	GS2200-24P	GS2200-48
Product Name	24-port GbE L2 Switch	24-port GbE L2 PoE Switch	48-port GbE L2 Switch
Product Picture			
Port Density			
10/100/1000BASE-T	24	-	44
10/100/1000BASE-T PoE	-	24	-
Open SFP Slot (GbE)	-	-	2
Dual Personality GbE Ports	4	4	4
Performance			
Switching Capacity (Gbps)	56	56	100
Switching Forwarding Rate (Mpps)	41.7	41.7	74.4
Packet Buffer (Bytes)	448K	448K	512K
MAC Address	16K	16K	8K
Power Requirement			
Input Voltage of AC	100 - 240 V AC, 50/60 Hz		
Maximum Power Consumption (Watt)	31	268	92.8
Environmental Specifications			
Operating temperature	0°C to 50°C/32°F to 122°F		0°C to 45°C/32°F to 113°F
Storage temperature	-40°C to 70°C/-40°F to 158°F		-25°C to 70°C/-13°F to 158°F
Operating humidity	10% to 95% (Non-condensing)		10% to 90% (Non-condensing)
Physical Feature			
Dimensions (WxDxH)(mm/in.)	440 x 173 x 44/ 17.32 x 6.81 x 1.73	440 x 310 x 43/ 17.32 x 12.20 x 1.69	438 x 300 x 44.5/ 17.24 x 11.81 x 1.75
Weight (kg/lb.)	2.5/5.51	4.8/10.58	4.5/9.92

Features

Standard Compliance

- IEEE 802.3u 100BASE-Tx Ethernet
- IEEE 802.ab 1000BASE-T Ethernet
- IEEE 802.3z 1000BASE-X Ethernet
- IEEE 802.3x flow control
- IEEE 802.1D spanning tree protocol
- IEEE 802.1w rapid spanning tree protocol
- IEEE 802.1s multiple spanning tree protocol
- IEEE 802.1p class of service, priority protocols
- IEEE 802.1X port authentication
- IEEE 802.3ad LACP aggregation
- IEEE 802.af Power over Ethernet

Traffic Management and QoS

- Rate limiting: Rule-based/port-based bandwidth control, 64 kbps granularity (egress only for GS2200-24/24P)
- Dual-Rate-Three-Color (GS2200-48)
- Port-based egress traffic shaping (GS2200-48)
- Broadcast storm control
- IEEE 802.1p with 8 priority queues per port for different traffic types
- Weighted Round Robin (WRR)/SPQ/WFQ scheduling algorithm
- Supports DSCP
- Supports DSCP to 802.1p priority mapping
- Supports IGMP/IGMP snooping v1, v2, v3
- Congestion control on all ports

Link Aggregation

- IEEE 802.3ad LACP link aggregation compliant
- Support static manually port trunking
- Up to 6 aggregation groups, 8 ports/per group randomly selected

Resilient Network

- IEEE 802.1w Rapid Spanning Tree Protocol (RSTP)
- IEEE 802.1s Multiple Spanning Tree Protocol (MSTP)
- Backup Power System (BPS) power supply redundancy (GS2200-48)
- PoE Power Supply (PPS) support to be a full power budget PoE device (GS2200-24P)

User Security and Authentication

- MAC filtering per port secures access to each port
- IEEE 802.1Q tag-based and port-based VLAN
- Support GVRP, automatic VLAN member registration
- 256 static VLAN, up to 4K dynamic VLAN (GS2200-48)
- 1K static VLAN, up to 4K dynamic VLAN (GS2200-24/24P)
- Full range 4K PVID support
- Port-base VLAN & VLAN isolation
- Intrusion lock
- MAC freeze
- Specific MAC forwarding per port: only specified MAC addresses can access the network (Port security)
- Limited MAC number per port
- IP source guard
- Loop guard
- RADIUS MAC login
- IP filtering
- TCP/UDP socket filtering
- BPDU transparency
- 802.1X port-based authentication, compensated assignment over VLAN and bandwidth for valid access
- TACACS+

Network Administration Security

- User name/password required for Web/Telnet/local console administrators
- Two-level security by specific SNMP read/write community
- Multiple login session
- Multiple access permission management
- SSH v1/v2
- SSL

Network Management

- Supports ZyXEL iStacking™, up to 24 switches can be managed by one IP address
- Web-based management
- Telnet CLI
- SNMP v1, v2c, v3
- RS-232c local console
- IP management: Static IP or DHCP client
- RMON four RMON groups 1, 2, 3, 9 (history, statistics, alarms, and events) for enhanced traffic management, monitoring, and analysis
- Port mirroring: supports source/destination/ both port mirroring

Intelligent ACL (L2/L3/L4 Access List Control)

- Based on MAC address
- Based on VLAN
- Based on IP address
- Based on protocol type
- Based on TCP/UDP type
- Based on DSCP

MIB Information

- RFC 1066 TCP/IP-based MIB
- RFC 1213, 1157 SNMP v2c/v3 MIB
- RFC 2011, 2012, 2013 SNMP v2 MIB
- RFC 1493 bridge MIB
- RFC 2674 bridge MIB extension
- RFC 1643 Ethernet MIB
- RFC 2358 Ethernet-like MIB
- RFC 1757 RMON group 1, 2, 3, 9
- RFC 2819, 2925 Remote Management MIB
- RFC 3621—Power Ethernet MIB (GS2200-24P)
- ZyXEL private MIB

Certification

- UL 60950-1
- CSA 60950-1
- EN 60950-1
- IEC 60950-1
- EU RoHS compliant

Accessories

Backup Power System (Optional)(GS2200-48)

Model	Features
BPS-120	• Up to 6 switches can be connected to one BPS-120 • Provides power to one switch without traffic or user interruption or switch rebooting in the event of a switch internal power supply failure • Temperature, power and fan speed monitoring

PoE Power Supply (Optional)(GS2200-24P)

Model	Features
PPS250	• Power module for ZyXEL Ethernet PoE Switch • Provides extra power budget to GS2200-24P of up to 400 W for PoE support • Temperature and fan monitoring • Dimensions (WxDxH): 280 x 206 x 44 mm (11.02" x 8.11" x 1.73") • Weight: 2 kg (4.41 lb.)

SFP Transceivers (Optional)

Speed	Model	Type	Description
Gigabit	SFP-1000T	RJ-45 connector	Up to 100 m using standard Ethernet cable
	SFP-SX-D	LC connector	SFP SX 550 m commercial type transceiver, DDMI version
	SFP-LX-10-D	LC connector	SFP LX 10 km commercial type transceiver, DDMI version
	SFP-BX1310-10-D	LC connector	Bidirectional singlemode, up to 10 km reach, DDMI version
	SFP-BX1490-10-D	LC connector	Bidirectional singlemode, up to 10 km reach, DDMI version
	SFP-LHX1310-40-D	LC connector	SFP LHX 1310 wavelength 40 km commercial type transceiver, DDMI version
	SFP-ZX-80-D	LC connector	SFP ZX 80 km commercial type transceiver, DDMI version

IMPORTANT: Bi-directional SFP must be used in pairs (Example: 1 x SFP-BX1310-10-D and 1 x SFP-BX1490-10-D connected together is a solution)

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